

AC-08
Abbreviated
CORRECTIVE ACTION PLAN and BUDGET FORMAT
for Abandonment of Monitoring Wells

This Corrective Action Plan (CAP) is used for the routine abandonment of monitoring wells no longer needed for petroleum release investigation or cleanup, or needed by the owner/operator for their own purposes. Monitoring wells, to which this CAP applies, include groundwater monitoring wells, soil vapor extraction wells, recovery wells, observation wells, sparge/injection wells, and piezometers.

Administrative Rules of Montana (ARM) 36.21.810 sets forth the legal requirements for properly abandoning monitoring wells. ARM 36.21.810 is attached and may be found at the following Internet address:

<http://www.mtrules.org/gateway/RuleNo.asp?RN=36.21.810>

Return the CAP to: Petroleum Technical Section, Montana Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901. **Please note that incomplete and/or unsigned CAPs will be returned** and may delay processing of claims submitted to the Petroleum Tank Release Compensation Board.

Facility Name _____ Facility ID# _____ Release # _____

Facility Address _____
(Street) (City) (Zip)

Owner/Operator Name _____

Owner/Operator mailing address, if different from above: _____

Consultant's name, address, and phone number: _____

List monitoring wells by name and number to be abandoned: _____

List monitoring wells by name and number to be maintained: _____

Specify the method by which the monitoring wells will be abandoned: _____

Target date for abandonment of the monitoring well(s): _____

Unit cost per monitoring well for abandonment (include mobilization, portland cement, grout or bentonite, equipment, and consultant or contractor labor costs): \$ _____ /well

Total cost of abandoning the above-listed monitoring wells: \$ _____

I elect to maintain the monitoring wells located at the above-referenced Facility and will monitor the wells at least every three years and in accordance with applicable requirements of the Montana Department of Natural Resources & Conservation Division.

I elect to abandon the monitoring wells located at the above-referenced Facility and certify that the above-referenced monitoring wells are to be properly abandoned in accordance with the provisions ARM 36.21.810 and other applicable requirements of the Montana Department of Natural Resources & Conservation Division.

(Signature of Facility owner or operator or authorized representative)

(date)

36.21.810 ABANDONMENT

(1) Wells which have not been monitored for more than 3 years shall be deemed abandoned unless written permission is obtained from the board to maintain the well.

(2) Monitoring wells, that have outlived their useful purpose shall be abandoned by one of the following methods:

(a) If the casing and screen are left in place, the casing and screen shall be sealed from the bottom up using a pump and hose or tremie pipe to conduct the sealing material to the bottom of the well or by filling the casing and screen with bentonite pellets or chips placed in a manner that will prevent bridging. Metal casings shall be cut off 3 feet below the ground surface and the last 3 feet backfilled with naturally occurring soils;

(i) It is recommended that in all cases where possible the casing be pulled.

(b) If the casing and/or screen are removed, the hole shall be filled with sealing material, concrete, or bentonite pellets or chips from the bottom up, as the casing and/or screen is removed. From 6 to 3 feet from the surface, bentonite shall be added to the well. The last 3 feet shall be filled with naturally occurring soils;

(c) The sealing material shall be bentonite pellets or chips, bentonite clay grout, neat cement grout, or concrete. They may contain nonbiodegradable fluidizing admixtures, provided they will not contaminate the ground water. Sealing materials which settle shall be topped to provide a continuous column of grout to within 3 feet of the surface; or

(d) Other methods for abandonment with prior board approval.

(3) For flowing wells, the abandonment procedures outlined in ARM [36.21.671](#) shall apply.

(4) A properly abandoned well shall not produce water nor serve as a channel for movement of water.

History: [37-43-202](#), MCA; [IMP](#) , [37-43-202](#), MCA; [NEW](#) , 1990 MAR p. 739, Eff. 4/13/90; [AMD](#) , 1991 MAR p. 913, Eff. 6/14/91; [AMD](#) , 1997 MAR p. 65, Eff. 1/17/97.

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For additional information or requirements for abandoning or maintaining monitoring wells, please contact the Montana Department of Natural Resources & Conservation Division, Board of Water Well Contractors at (406) 444-6643